

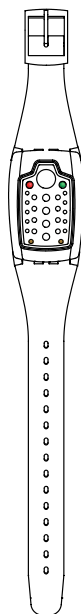
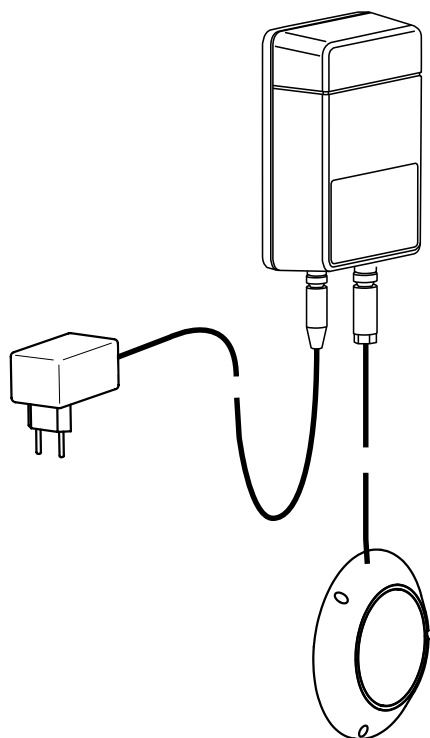
# Installation and Operating Instructions



Pool Safety System

For the versions:

- **BASIC**
- **STANDARD**
- **PROFESSIONAL**




SWISS MADE + TECHNOLOGY FOR SAFETY



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# 1 Explanation of Symbols and Safety Notes

## 1.1 Explanation of symbols



### Safety notes

In the text, safety notes are marked with a warning triangle.

Signal words denote the level of danger that would occur if the measures for minimising the risk were not followed.

**Caution** means that minor material damage could occur.

**Warning** means that minor personal injury or serious material damage could occur.

**Danger** means that serious personal injury could occur. In particularly serious circumstances there is a risk of death.

- A point appears before instructions.

## 1.2 Safety notes



### Safety notes

- Before fitting and commissioning the BlueFox System or before installing and using the BlueFox Control Software you must have read and understood these installation and operating instructions.
- Following the instructions contained in these installation and operating instructions will not completely protect you or third parties from danger.
- Observe local regulations pertaining to "electrical installations in damp environments".
- No modifications may be made to the BlueFox System.
- The alarm box, pool sensor and all other BlueFox components may not be opened.





### Safety notes

- Observe the safety notes contained in these installation and operating instructions.
- Risk of drowning! Initiate rescue immediately alarm sounds.
- The BlueFox system does not provide complete protection from drowning. Monitoring the swimming pool remains your personal responsibility. See *Disclaimer, P. 47*.
- The BlueFox system may only be used for the intended purpose and in the intended field of application. See *Intended use, P. 9*.
- Only use the plug-in mains adapter supplied and original BlueFox accessories.
- A short tone sequence will sound if there is a power failure. The BlueFox system will then no longer provide support for monitoring the swimming pool. Have the plug-in mains adapter checked by a specialist.

## 2 Overview

### 2.1 Notes on the installation and operating instructions

These installation and operating instructions describe the installation and use of the BlueFox system, the installation and use of the BlueFox Control software and the configuration of the monitoring bracelet.

You will find “step-by-step” instructions in the section *Using the System for the First Time, P. 12*.

- You can download these installation and operating instructions from [www.bluefox-poolsafety.com](http://www.bluefox-poolsafety.com) as a PDF file. The hyperlinks, bookmarks and search function of the PDF version allow you to quickly find topics.

The BlueFox system is under continuous development. Pictorial and graphical examples in these installation and operating instructions may deviate from the equipment supplied.



BlueFox can be supplied in the following versions: BASIC, STANDARD and PROFESSIONAL. Information that only applies to the STANDARD and/or PROFESSIONAL version(s) is marked accordingly.


BlueFox version	Symbol	Meaning
BASIC	BAS	Information marked BAS applies only to the BASIC version.
STANDARD	STD	Information marked STD applies only to the STANDARD version.
PROFESSIONAL	PRO	Information marked PRO applies only to the PROFESSIONAL version.



## 2.2 Operating principle "Active mode"

### Pool monitoring during bathing hours



For pool monitoring during bathing hours the active mode  must be activated. (For how to activate, see *page 18*).

For each swimming pool user, a monitoring bracelet is pre-programmed with a personal alarm depth and alarm time – according to the user's swimming ability. Programming is carried out using the PC program BlueFox Control (see *Programming the alarm depth and time, P. 34*).

When the user enters the water the monitoring bracelet automatically switches on (water contacts).

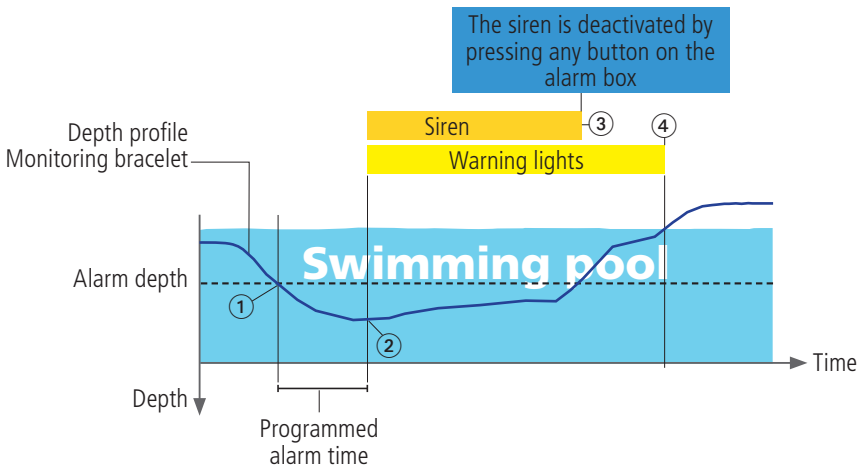
### Course of events when an alarm sounds

At depths greater than the alarm depth and when the programmed alarm time expires, the monitoring bracelet activates the Alarm ②. The pool sensor receives the alarm signal and routes it to the alarm box. The following alarms are triggered: Warning lights and sirens, **STD PRO** radio alarm.



#### Warning!

Risk of drowning! Initiate rescue immediately alarm sounds.



The siren can be deactivated by pressing any button on the alarm box ③. The following alarms remain active until the monitoring bracelet is taken out of the water ④: Warning lights, **STD PRO** radio alarm.



If no button is pressed, all alarms will be cancelled 10 seconds after the monitoring bracelet is taken out of the water.

All alarms are cancelled 6 minutes at the latest after the alarm was activated.

## 2.3 Operating principle "passive mode"

### Pool monitoring outside normal bathing hours



For monitoring the pool outside normal bathing hours the "passive mode" must be activated. (For how to activate, see *page 19*).

If the pool sensor registers activity in the pool (e.g. a person or object falling into the water) the following alarms are triggered. Warning lights and sirens, **STD** **PRO** radio alarm see *page 30*.



The passive mode LED next to the padlock symbol flashes.



#### **Warning!**

Risk of drowning! Initiate rescue immediately alarm sounds.



#### **Warning!**

Risk of drowning because the BlueFox system is not monitoring the pool. If an alarm sounds and/or the passive mode LED is flashing BlueFox is not monitoring the pool. The pool must be monitored by a person.

The alarm can be deactivated by pressing any button on the alarm box.

If no button is pressed, the alarm will be cancelled 6 minutes after the alarm was activated.

As soon as the waves have subsided (after approx. 4 minutes), the passive mode LED will illuminate permanently. Passive mode monitoring is activated once again.

## 2.4 Intended use

The BlueFox system has been designed for use in private and public swimming pools (indoor and outdoor swimming pools). The alarm box enclosure is resistant to light water splashes (IP65). For outdoor installations the alarm box must be covered and protected from direct sunlight.



2.5 Package contents

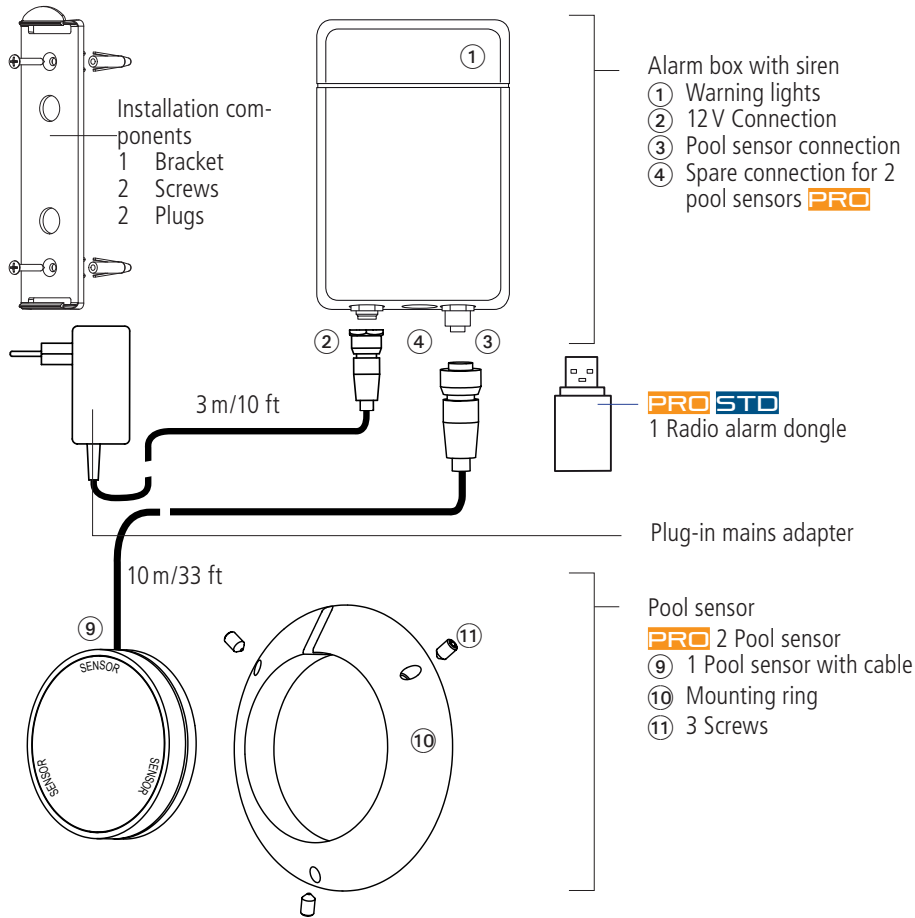


Fig. 1 Alarm box pool sensor

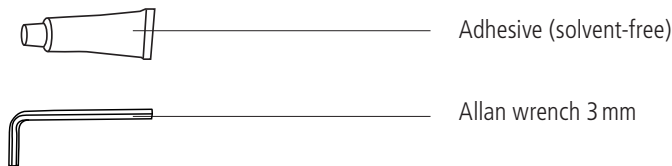


Fig. 2 Adhesive and tool



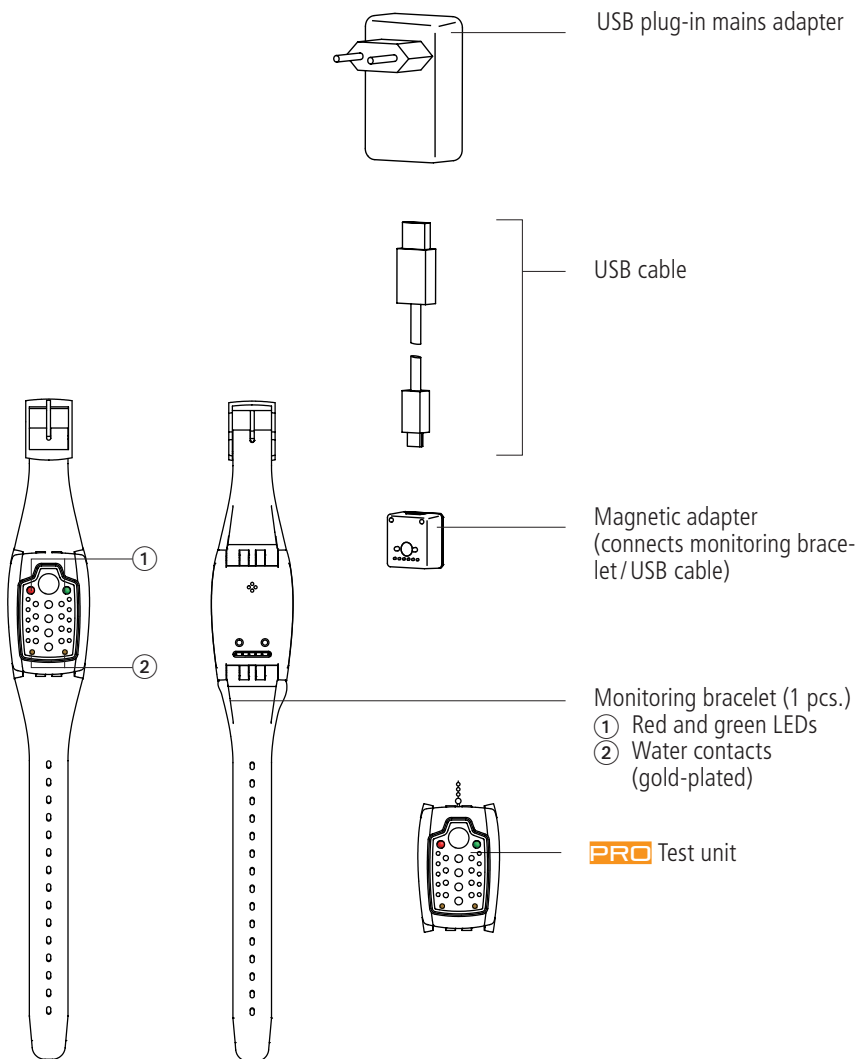


Fig. 3 Monitoring bracelet accessories

For further BlueFox system components, see *Optional Accessories*, P. 49.



### 3 Using the System for the First Time

- Read the installation and operating instructions.
- Charge the monitoring bracelet battery, see *Charging the monitoring bracelet's battery*, P. 33.
- Install the BlueFox Control software, see *Installing the BlueFox Control software*, P. 37.
- Configure the monitoring bracelet for system test (alarm depth 5 cm, alarm time 5 sec.), see *Programming the alarm depth and time*, P. 34.
- **PRO** The supplied test unit can be used for the test.
- Install and connect the alarm box, see *Installing and connecting the alarm box*, P. 13.
- Determine the location for installing the pool sensor, see *page 15*
- Check the pool sensor position, see *Testing active mode*, P. 28.
- Fit the the pool sensor (**PRO** pool sensors), see *Fitting the pool sensor*, P. 16.
- Fix the pool sensor cable.
- **STD PRO** Putting the radio alarm dongle into operation, see *page 30*
- Configure a monitoring bracelet for each person using the swimming pool, see *Programming the alarm depth and time*, P. 34.
- Start using the BlueFox system, see *Using the System*, P. 26.



## 4 Installing the BlueFox System

- Dispose of packaging materials in an environmentally acceptable manner.
- Read the Installation and operating instructions.

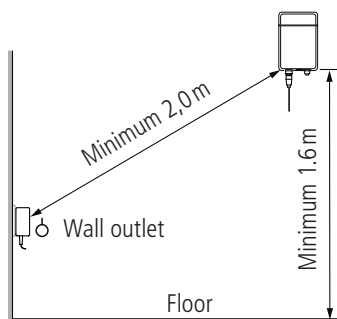
### 4.1 Installing and connecting the alarm box

Only an approved specialist may connect the electricity supply, connect the unit to the mains and commission the alarm box.

#### 4.1.1 Selecting a location for installation

**When selecting a location for installation take into consideration:**

- The pool sensor must be installed approx. 25 cm / 0.8 ft beneath the water surface. See *Fitting the pool sensor*, P. 16.



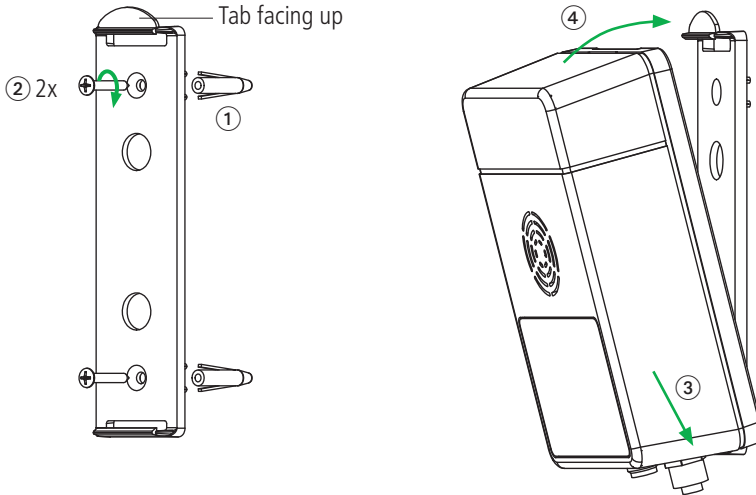
- Minimum distance between the alarm box and wall outlet: 2 m (see fig.)
  - Minimum distance between the floor and the alarm box: 1.6 m (see fig.)
  - The alarm box must be installed out of the reach of children (see warning *Changing the PIN*, page 23).
  - The alarm box must be within reach of the operator.
  - The alarm box must be fitted within view of the pool.
- Observe any country-specific regulations pertaining to the installation location.
  - Observe the local building regulations.
  - Observe the requirements of the local electricity supply utility.
  - In outdoor installations the alarm box must be covered and protected from direct sunlight.

Option: Pool sensor cable extension (see *Optional Accessories*, P. 49)



#### 4.1.2 Installing the alarm box

- Hold the bracket to the wall and mark the drilling positions.



**Danger!** Electric shock risk!  
Connect the drill to a residual current circuit breaker.

- Drill the holes for the plugs (drill diameter 6 mm) and insert the plugs ①.
- Fix the bracket to the wall ② (tab facing up).
- First fit the alarm box into the bottom of the bracket ③ and then click it in-place at the top ④.

#### 4.1.3 Electrical connections to the alarm box

##### Requirements for the plug-in mains adapter

- The mains socket may not be located in a wet area (swimming pool, shower, etc.).
- The mains socket must be installed by an approved expert.
- AC 100-240V, 50 Hz
- Residual current circuit breaker and earth terminal

##### Procedure

- Connect the 12V cable to the alarm box and screw tight.
- Fix the 12V cable.





### **Danger! Electric shock risk!**

Do not use extension cables between the plug-in mains adapter and the mains socket.

- Insert the plug-in mains adapter into a mains socket (with earth terminal) located away from the wet area. Use a residual current circuit breaker. (See above, *Requirements for the plug-in mains adapter*, P. 14). The last selected operating mode is activated (see *Operating principle "passive mode"*, P. 9, *Operating principle "Active mode"*, P. 8, *System settings*, P. 20).
- If the cable is too short, have an additional mains socket (with residual current circuit breaker and earth terminal) fitted outside the wet area by an approved electrician.

## **4.2 Determining the installation position for the pool sensor**

A single sensor (**BAS STD**) can be used to monitor pool sizes of up to 50 m<sup>2</sup>; 2 sensors (**PRO**) will cover pools of up to 100 m<sup>2</sup>.

 Pool sensor symbol

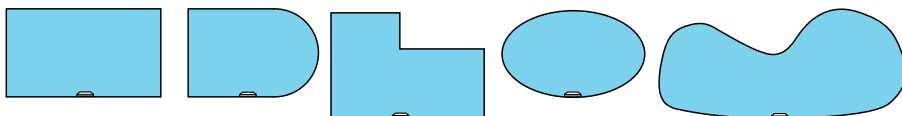


Fig. 4 **BAS STD** Pool sensor positioning examples

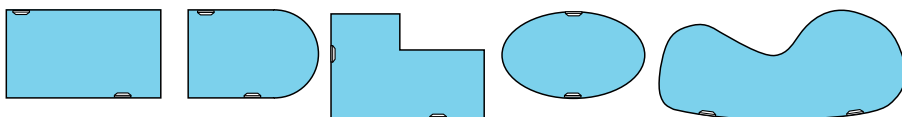
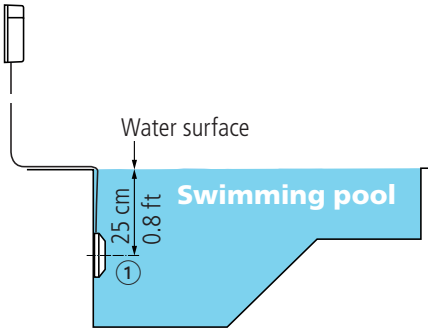


Fig. 5 **PRO** Pool sensor positioning examples



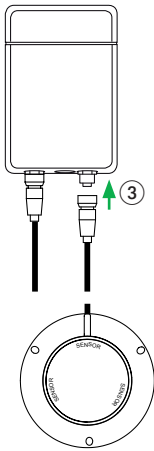
### 4.3 Fitting the pool sensor



The pool sensor must be fitted to the pool wall 25 cm /0.8 ft beneath the water surface (PRO 2 pool sensors). It is not necessary to reduce the water depth in order to fit the sensor. The supplied adhesive can be used under-water.

- Do not fit the pool sensor close to inlet jets, countercurrent systems or air jet nozzles.

Fig. 6 Positioning the pool sensor



- Ensure that the plug on the pool sensor cable is dry.
- Connect the pool sensor cable to the alarm box and screw tight ③.
- If the pool sensor cable is too short: use an extension cable (see *Optional Accessories*, P. 49).

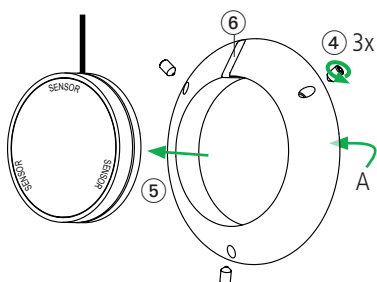
Fig. 7 Connecting the pool sensor to the alarm box

- Check the position of the pool sensor, see *Testing active mode*, P. 28.
- If test fails: Check the position of the pool sensor and test again.

Following successful test:

- Mark the position of the pool sensor in the swimming pool.
- Take the pool sensor out of the water.





- Loosen the screws ④.
- Remove the mounting ring ⑤.

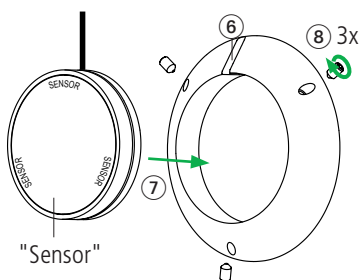
Fig. 8 Removing the mounting ring

- Read the instructions for use and the safety datasheet for the adhesive.
- Apply a thin layer of the supplied adhesive to the hollow on the rear of the mounting ring (surface A).
- Within 6 minutes, affix surface A of the mounting ring to the marked position in the swimming pool. Align the cable slot ⑥ in the desired direction.
- Do not apply any loads to the mounting ring for 24 hours.



### Caution!

Incorrect fitting of the pool sensor will prevent proper monitoring of the swimming pool. The side of the pool sensor marked "Sensor" must face into the swimming pool (water).



- After a minimum of 24 hours
- Push the pool sensor into the mounting ring ⑦ (route the pool sensor cable through the slot in the mounting ring ⑥).
- Tighten the screws using only slight force ⑧.

Fig. 9 Fitting the pool sensor into the mounting ring

- Affix the pool sensor cable.
- Test the system, see *Testing active mode*, P. 28.



# 5 Alarm box operation

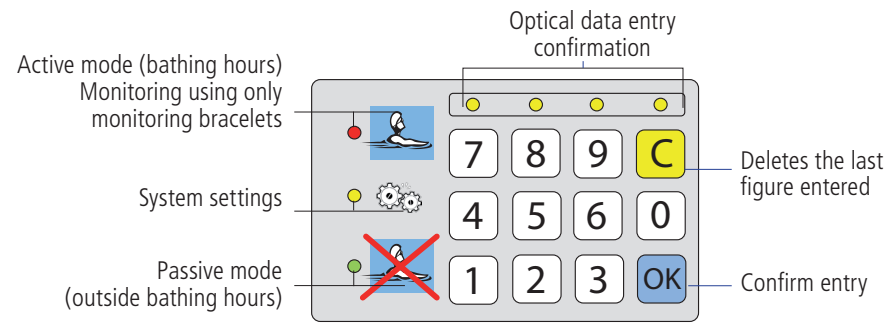





Fig. 10 Alarm box keypad

## 5.1 Operating modes

The system allows the following operating modes:

- |   |  |
|---|--|
|   | <ul style="list-style-type: none"><li>• Pool monitoring during bathing hours.<br/>Operating mode "Active mode" – see page 8 for description<br/>For activation see page 18</li></ul>   |
|   | <ul style="list-style-type: none"><li>• System tests and system settings.<br/>Operating mode: "System settings" – see page 20 for description<br/>For activation see page 20</li></ul> |
|  | <ul style="list-style-type: none"><li>• Pool monitoring outside bathing hours.<br/>Operating mode "Passive mode" – see page 9 for description<br/>For activation see page 19</li></ul> |

## 5.2 Activating the "Active mode"

### Pool monitoring during bathing hours

For pool monitoring during bathing hours the active mode  must be activate.

Note: A detailed description of the active mode can be found on page 8. See page page 26 for a description of how the active mode is used in day-to-day operations.



#### Procedure:



Press the  button.

If PIN protected: Enter the 4-figure PIN and then press OK (see *page 25*).




Following successful activation the LED alongside the  button will illuminate permanently.

**STD PRO** The radio alarm dongle flashes green, see *page 30*

### 5.3 Activating the "Passive mode"

#### Pool monitoring outside bathing hours

For pool monitoring outside bathing hours the "Passive mode"  must be activated.

Note: A detailed description of the passive mode can be found on *page 9*. See *page 27* for a description of how the passive mode is used in day-to-day operations.


#### Procedure:



Press the  button.

If PIN protected: Enter the 4-figure PIN and then press OK (see *page 25*).




The LED alongside the  button will flash until the waves have subsided (after approx. 4 minutes).



#### Warning!

Risk of drowning because the BlueFox system is not monitoring the pool. If the passive mode LED is flashing BlueFox is not monitoring the pool. The pool must be monitored by a person.



Following successful activation of the passive mode the LED alongside the  button will illuminate permanently.

**STD PRO** The radio alarm dongle flashes green, see *page 30*



## 6 System settings



### Warning!

When the "System settings" operating mode is activated, the BlueFox system **does not** monitor the pool and cannot trigger an alarm. Only activate the "System settings" operating mode when the pool is being monitored by another person.

Proceed as follows to carry out system tests or to change system settings:

1. Activate system settings



Press the  button.


If PIN protected: Enter the 4-figure PIN and then press OK (see *page 25*).



Following successful activation the LED alongside the  button will illuminate permanently.

2. Find the desired function in the table below (system test or system settings) and then enter the corresponding number combination. When each character is entered, one of the 4 yellow LEDs will illuminate. To delete the entered characters press the C button.
3. Confirm entry of the number combination with OK.

At this point you will have the following options:

- Repeat points 2 and 3 to carry out further system settings.
- Press the  button to quit "System settings". BlueFox will return to the previous operating mode (e.g. "Active mode").

Timeout: If no buttons are pressed for 10 seconds, the system will return to the previous operating mode.

### 6.1 System tests and system settings

In the following table you will find a list of the possible system tests and all of the system settings that can be change by the user.

Preparation:

If "System settings" has not yet been activated, then do so (see *Activate system settings, page 20*).



## System tests

## Procedure / notes



### PRO STD

#### **Sending a test alarm to the radio alarm dongle**

Enter "0001" and press OK.

The alarm box sends a test alarm to the radio alarm dongle.

The following alarms are triggered on the radio alarm dongle: The radio alarm dongle flashes white and the buzzer sounds, *see page 30*.

The test alarm can be cancelled by pressing any button on the alarm box.



#### **Testing the warning light**

Enter "0002" and press OK.

The alarm box warning light flashes for 5 seconds or until any button on the alarm box is pressed.



#### **Testing the siren**



##### **Caution!**

Risk of hearing damage caused by the sound pressure level from the siren! Wear hearing protection, keep people away from the siren. Immediately press any button on the alarm box once the siren sounds.

Enter "0003" and press OK.

The alarm box siren sounds for 5 seconds or until any button on the alarm box is pressed.



## Cancelling the siren



### Warning!

Risk of drowning because the acoustic alarm is inoperable. Only deactivate the siren when the pool is being monitored by another person.

Enter "1001" and press OK.

When the siren is deactivated it will **not** sound if there is an alarm!

**STD PRO** Radio alarm dongle: Buzzer is not deactivated

## Activating the siren

Enter "1002" and press OK.

The siren sounds if there is an alarm.

For testing the siren, see *Testing the siren, page 21*

## Time delay before automatically switching to passive mode



Does automatically change from active mode to passive mode 30 minutes after the waves have subsided

If the system determines that the pool is not being used it will – once the time delay selected here has expired – automatically change from active mode to passive mode. Enter "1003" and press OK.

The 4 yellow LEDs above the keypad indicate the current delay by flashing:

- 1 LED flashing: Does not automatically change from active mode to passive mode
- 2 LEDs flashing: Does automatically change 4-5 minutes after the waves have subsided
- 3 LEDs flashing: Does automatically change 30 minutes after the waves have subsided
- 4 LEDs flashing: Does automatically change 1 h after the waves have subsided

Enter the desired time delay and press OK:

"1" = 4-5 minutes after the waves have subsided

"2" = 30 minutes after the waves have subsided

"3" = 1 hour after the waves have subsided

"0" = does not automatically change from active mode to passive mode



## System settings

## Procedure / notes

### Alarm sensitivity of the pool sensors (passive mode)



This example shows a sensitivity level of 2

Enter "1004" and press OK.

The 4 yellow LEDs above the keypad indicate the current sensitivity by flashing:

1 LED flashing: Low sensitivity

4 LEDs flashing: Very high sensitivity

To change the sensitivity, enter a number between 1 and 4 (high sensitivity) and then press OK.

## Changing the PIN

Enter "2001" and press OK.



### Warning!

Risk of drowning due to unintended deactivation of the pool monitoring system.

If "0000" is selected as the PIN the following operating modes can be activated without entering a PIN:

- Active mode (bathing hours)
- Passive mode (outside bathing hours)
- System settings

Avoid unintended changes of operating mode by setting a PIN.

Enter your new 4-figure PIN and confirm your entry with OK.

The device is supplied with the PIN set to "0000" (Change of operating mode possible without a PIN).

Forgotten the PIN? Using the PIN "9999" will give you access to all PIN-protected functions at any time (master password).



## System settings

## Procedure / notes

### Resetting the alarm box to the factory defaults

All of the BlueFox system settings will be reset to their factory defaults.

#### Factory defaults

PIN	0000 (change of operating mode possible without a PIN)
Sensitivity of the pool sensors	2 (medium sensitivity)
Time delay for automatically changing to passive mode	0 (does not automatically change to passive mode)
Siren	activated (the siren sounds in the case of an alarm)

Enter "2002" and press OK.

---



## 6.2 Entering the PIN

A PIN (Personal Identification Number) can be set to prevent operating modes from unintentional change. See *Changing the PIN*, page 23.



or



Select the desired operating mode by pressing the corresponding button.



If a PIN has been set to prevent operating modes from being unintentionally changed, the LED to the left of the depressed button will start to flash and the 4 yellow LEDs above the keypad will prompt you (by flashing) to enter the 4-figure PIN.

Enter the 4-figure PIN.

Forgotten the PIN?: See *Changing the PIN*, page 23



When each character is entered, one of the 4 yellow LEDs will change from flashing to permanently illuminated.





To delete the entered characters press the C button.



Confirm the entry with OK.

The LED to the left of the selected operating mode will then be permanently illuminated. When passive mode is activated the LED will continue to flash until the waves have subsided.

If an incorrect PIN is entered the system will return to the operating mode that was active before the PIN was entered.

Cancelling the change of operating mode: By clicking the  button /  button or after 10 seconds when no button has been pressed, the system will return to the previously active operating mode.



## 7 Using the System

This section describes the optimum use of the system in day-to-day operations. Activate the "Active mode" or "Passive mode". See 7.1 *Using active mode*, page 26 and 5.3 *Activating the "Passive mode"*, page 19

**STD PRO** Putting the radio alarm dongle into operation, see page 30.

### 7.1 Using active mode

(with monitoring bracelet)

### 7.2 Preparations

- Ensure that the system is connected to the power supply.
- Activate active mode see page 18.
- Test the system (see *Testing active mode*, P. 28).
- Check the monitoring bracelet (see *Monitoring bracelet*, P. 32).
- **Ensure that all persons in the swimming pool area are wearing a monitoring bracelet.**

### 7.3 Alarm (active mode)

Button

**STD PRO** The radio alarm is triggered, see page 30.

The red LED on the monitoring bracelet flashes (alarm has been sent).



#### Warning!

Risk of drowning!

- Initiate rescue immediately alarm activates.
- Find the person in distress and recover that person immediately.
- Commence lifesaving actions.
- Call for medical assistance.

#### Turn siren off

- The siren can be deactivated by pressing any button on the alarm box.
- If no button has been pressed, all alarms will be cancelled 10 seconds after the monitoring bracelet has been taken out of the water.

You will find further details on active mode in section *Operating principle "Active mode"*, P. 8.



## Resetting the monitoring bracelet

- Once the rescue is completed: Reset the monitoring bracelet's alarm using the BlueFox Control software (see *Calling the status / Clearing the alarm / Resetting*, P. 36)
- Charge the monitoring bracelet's battery (see *page 33*).

## 7.4 After use

- Dry the monitoring bracelet using a cloth.
- Charge the battery if the red LED on the monitoring bracelet flashes at one-second intervals (when the unit is out of the water). See *Charging the monitoring bracelet's battery*, P. 33.
- When the pool has closed: Activate passive mode (see *page 19*)
- Leave the system connected to the power supply.

## 7.5 Using passive mode

### 7.5.1 Preparations

- Ensure that the system is connected to the power supply.
- Activate passive mode (see *page 27*).
- **STD PRO** Putting the radio alarm dongle into operation, see *page 30*.

### 7.5.2 Alarm (passive mode)

When an alarm has been triggered the siren sounds and the warning light flashes.

**STD PRO** The radio alarm is triggered, see *page 30*.

The passive mode LED flashes.



#### Warning!

Risk of drowning!

- Initiate rescue immediately alarm activates.
- Find the person in distress and recover that person immediately.
- Commence lifesaving actions.
- Call for medical assistance.





### Warning!

Risk of drowning because the BlueFox system is not monitoring the pool. In the case of an alarm and/or if the passive mode LED is flashing, BlueFox is not monitoring the pool. The pool must be monitored by a person.

The alarm can be deactivated by pressing any button on the alarm box. If no button is pressed, the alarm will be cancelled 6 minutes after the alarm was activated.

As soon as the waves have subsided, the passive mode LED will illuminate permanently. Further details about passive mode can be found in section *Operating principle "passive mode"*, P. 9.

## 8 Testing active mode



### Caution!

Risk of hearing damage caused by the sound pressure level from the siren! Wear hearing protection; keep children away from the siren. Immediately remove the test monitoring bracelet from the water once the alarm has activated.

- Configure the monitoring bracelet for system test, see *Programming the alarm depth and time*, P. 34.
- **PRO** The supplied test unit can be used for the test.
- Activating the "Active mode" (see page 18).
- Hold the test monitoring bracelet in the swimming pool long enough for the siren to sound.
- **STD PRO** Radio alarm dongle: Flashes white, buzzer sounds.
- Remove the test monitoring bracelet from the water. The alarm will be cancelled automatically.
- Repeat the test at various locations in the swimming pool (recesses, corners).
- If the test is only partially successful or if the test fails: See *Troubleshooting*, P. 42



## 9 Testing passive mode



### Warning!

Risk of drowning because the BlueFox system is not monitoring the pool. If the passive mode LED is flashing BlueFox is not monitoring the pool. The pool must be monitored by a person.



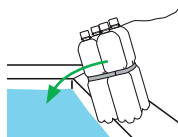
### Caution!


Risk of hearing damage caused by the sound pressure level from the siren! Wear hearing protection; keep children away from the siren. Immediately press any button on the alarm box once the siren sounds.

- Using adhesive tape, fasten together four 1.5 litre plastic bottles filled with water to form a 6kg weight.
- Secure an approx. 2 m long line to the weight. This line is used to pull the weight out of the water again after the test.
- Activate passive mode, *page 27*



- As soon as the waves have subsided (after approx. 4 minutes), the passive mode LED will illuminate permanently.
- Holding the end of the line in your hand, throw the 6kg weight into the water from the edge of the swimming pool. The alarm must activate after a maximum of 12 seconds.



- Once an alarm is triggered the siren will sound and the warning lights and LED alongside the -switch will flash. Once the siren sounds press any button immediately. The alarm will be deactivated.
- Pull the weight out of the swimming pool.
- As soon as the waves have subsided (after approx. 4 minutes), the passive mode LED will illuminate permanently.
- Repeat the test at other positions in the swimming pool (corners, niches).
- If the test was only partially successful or not successful at all: See *Troubleshooting, P. 42*



# 10 Radio alarm dongle


The alarm box sends messages (e.g. radio alarms) to the radio alarm dongles. Once a message is received each radio alarm dongle forwards the received message (routing). Using multiple radio alarm dongles means that the alarm will be broadcast throughout the whole building.

Radio alarm dongles that are supplied together with the alarm box do not need to be paired. Radio alarm dongles that are supplied at a later date must be "paired" with the alarm box address before they can be used.

## 10.1 Putting the radio alarm dongle into operation

Connect the radio alarm dongle to the USB power supply or connect the radio alarm dongle to the PC and power-up the PC.

## 10.2 Meaning of the messages

Received message	Reaction of the Radio alarm dongle	Meaning / instructions for action
Radio alarm (active or passive mode)	White LEDs are flashing and the buzzer sounds	<div><b>Warning!</b> Risk of drowning! Initiate rescue immediately alarm activates.</div> <p>The buzzer can be deactivated by pressing any button on the alarm box. The white LEDs will continue to flash until all of the alarms given by the alarm box are deactivated.</p>
Active or passive mode successfully activated	Green LEDs flash at 3 second intervals	The radio alarm dongle is receiving the signals from the alarm box
No reception	Buzzer sounds every 5 seconds	<ul style="list-style-type: none"><li>Change the position of the radio alarm dongle</li><li>Use additional radio alarm dongles</li></ul>



Received message	Reaction of the Radio alarm dongle	Meaning / instructions for action
Test alarm	White LEDs are flashing and the buzzer sounds	See <i>System settings</i> , P. 20
System error (e.g. defective pool sensor)	Buzzer sounds every 5 seconds	Check the system

### 10.3 Pairing the radio alarm dongle with the alarm box



## 11 Monitoring bracelet

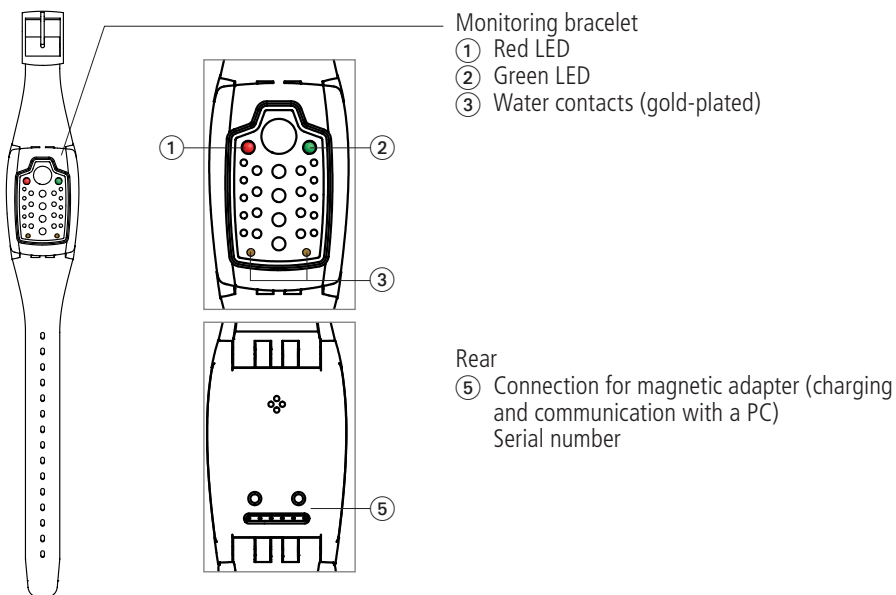


Fig. 11 Monitoring bracelet

### 11.1 Preparation

- Lightly shaking the monitoring bracelet will cause it to enter standby mode.
- When the green LED is flashing the monitoring bracelet is ready for use.
- Charge the battery if the red LED on the monitoring bracelet flashes at one-second intervals (when the unit is out of the water). See *Charging the monitoring bracelet's battery*, P. 33.
- Before first use or if the LEDs do not flash: Charge the battery, See *Charging the monitoring bracelet's battery*, P. 33.
- Set the alarm depth and alarm time, see *Programming the alarm depth and time*, P. 34.
- Ensure that all persons in the swimming pool area are wearing a monitoring bracelet.
- Begin using the alarm box, see *Using the System*, P. 26.



## 11.2 Charging the monitoring bracelet's battery

- Charge the battery before first use.
- Charge the battery if the red LED on the monitoring bracelet flashes at one-second intervals (when the unit is out of the water).

Note: If the red LED on the monitoring bracelet begins to flash, the monitoring bracelet can still be used until the end of the day.



### **Danger!** Electric shock risk!

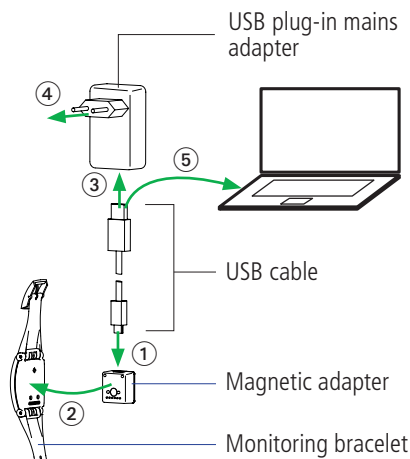
Only use the USB plug-in mains adapter, USB cable and magnetic adapter in dry rooms.



### **Caution!**

Humidity may damage USB plug-in mains adapter, USB cable and magnetic adapter.

Only charge the monitoring bracelet in dry rooms. Before connecting the monitoring bracelet dry it using a dry cloth.



- Connect the USB cable (small plug) to the magnetic adapter ①.
- Connect the magnetic adapter to the monitoring bracelet ② (note correct alignment).
- **Charging using the USB mains adapter:**  
Connect the USB cable (large plug) to the USB plug-in mains adapter ③ and connect the USB plug-in mains adapter to the electricity supply ④.
- **Charging via a PC USB connection:**  
Connect the USB cable (large plug) to the PC ⑤ and power-up the PC.

Charging in progress: Red LED flashes every 5 seconds

Charging complete: Green LED flashes every 5 seconds

Time required for a full charge: Approx. 2-3 hours

- After charging: Disconnect the monitoring bracelet from the magnetic adapter. Remove the USB plug-in mains adapter from the electricity supply.



### 11.3 Programming the alarm depth and time

The alarm depth and alarm time are programmed using the BlueFox control software. Installation of the software is described in the section *Installing the BlueFox Control software, P. 37*.



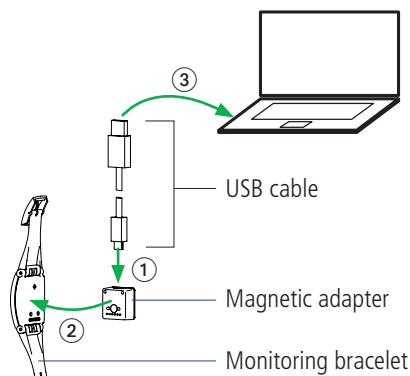
#### Caution!

Humidity may damage USB plug-in mains adapter, USB cable and magnetic adapter.


Only connect monitoring bracelets to the PC in dry rooms.

Before connecting monitoring bracelets, dry them using a dry cloth.

- Connecting a monitoring bracelet to a PC:



- Connect the USB cable (small plug) to the magnetic adapter ①.
- Connect the magnetic adapter to the monitoring bracelet ② (note correct alignment).
- Connect the USB cable (large plug) to the PC ③.


- Allocate each person or group of people an individual alarm depth and alarm time together with a monitoring bracelet colour.
- Enter the alarm depth and alarm time together with the associated monitoring bracelet colour into the *Configuration table, P. 50*, .
- Open the BlueFox Control software:  
Double-click the  symbol on the desktop or navigate via **Start > Program > BlueFox Control**.





Select the alarm depth and associated alarm time ①:

Select a pre-set value ② or use the slider ③ to enter the pre-defined alarm depth and alarm time.

- Click **Save New Settings** ④ to transfer the settings to the monitoring bracelet.
- Click **Verify Settings** ⑤ to read and verify the settings saved to the monitoring bracelet.
- Disconnect the monitoring bracelet from the magnetic adapter.
- Close the BlueFox control software: Close the window .



# 11.4 Calling the status / Clearing the alarm / Resetting



- Click **Call Status** to retrieve the battery and alarm status ⑥.
- **Clear Alarm** ⑦.
- Click **Reset** ⑧, if the monitoring bracelet is not recognised or if an error message appears after the monitoring bracelet is connected.  
Following a reset, the alarm depth and associated alarm time must be re-entered, see *Programming the alarm depth and time*, P. 34.



## 12 BlueFox Control Software

### 12.1 Hardware requirements

For the installation and problem-free use of the BlueFox control software a Windows compatible PC with the following specifications is required:

CPU at least 1 GHz (1.5 GHz recommended)

RAM: min. 512 MB

Display: at least XGA (1024x768)

Hard disk: at least 50 MB free capacity

USB interface

### 12.2 PC operating system requirements

Recommended operating systems for the BlueFox control software:

MS Windows 7, 32 bit or 64 bit

MS Vista™, Service Pack 1 or higher

MS Windows XP™, Service Pack 2 or higher

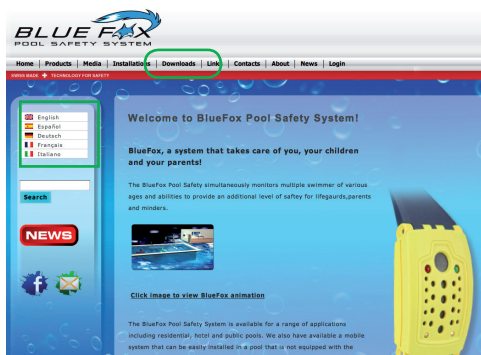
MS Windows 2000™, Service Pack 4 or higher

Internet connection (for downloading the software)

The operating system in use must be working properly and be fully maintained. The respective current Service Packs must be installed.

### 12.3 Installing the BlueFox Control software

- Connect the PC to the Internet.
- Navigate to [www.bluefox-poolsafety.com](http://www.bluefox-poolsafety.com) in your browser.



- Select your required language.
- Click Downloads.





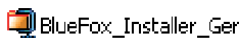
- Click BlueFox.



- Click **Save**, select the destination folder, then **Save**.  
The download will start.



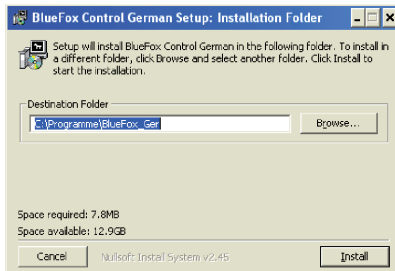
- **Open folder.**



- Double-click on the Zip file.

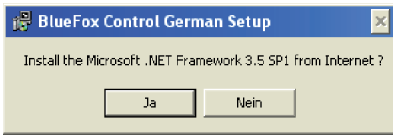


- Double-click on the Exe file.



- Check the destination folder and if desired, change the destination by clicking **Browse**.
- Click **Install**.  
Installation starts.





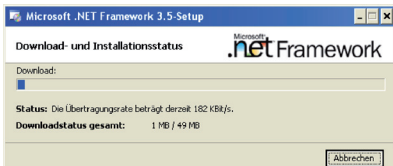
Installation of the BlueFox control software is interrupted. The BlueFox control software requires the Microsoft .NET Framework 3.5 program.

- Click **Yes** to download and install the Microsoft .NET Framework 3.5 program. This process can take several minutes

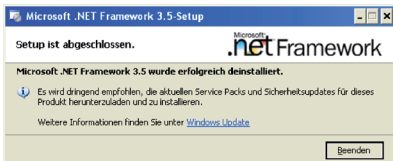


- Accept the software license.

- Click **Install**.

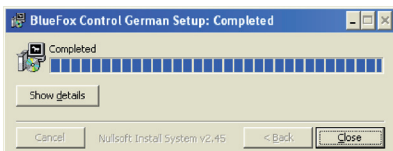


The process starts.



The Microsoft .NET Framework 3.5 program has been installed.

Installation of the BlueFox control Software is automatically continued and completed.



- Click **Close**.



## 12.4 Using the BlueFox control software

See *Programming the alarm depth and time, P. 34* and *Calling the status / Clearing the alarm / Resetting, P. 36*.

## 12.5 Uninstalling the BlueFox control software

Path to the deinstallation program:

Window **Start** menu > **Programs** > **BlueFox\_XX** > **BlueFox\_XX\_uninstall**

## 12.6 Updates

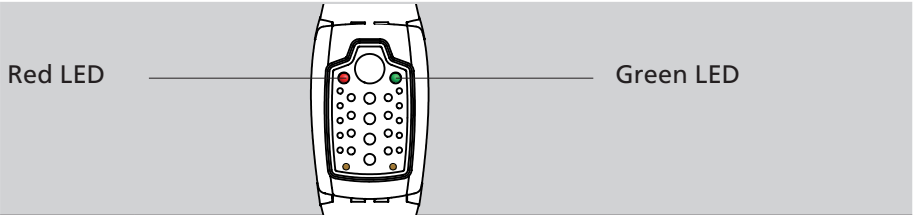
See [www.bluefox-poolsafety.com](http://www.bluefox-poolsafety.com)

Before installing an update the old version must first be uninstalled, see *Uninstalling the BlueFox control software, P. 40*.



# 13    Meaning of the monitoring bracelet LED displays

## 13.1    The monitoring bracelet in use



Red flashes 1x /sec.:  
Low battery.

- Charge the battery

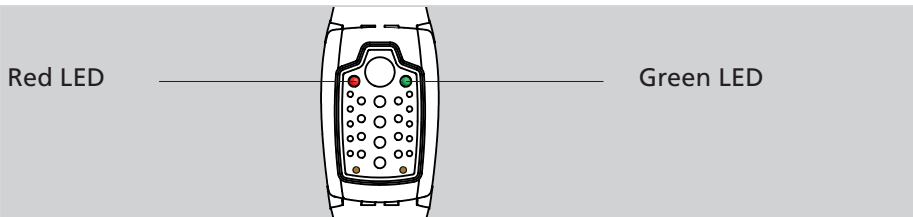
Green flashes every 5 sec.:  
Monitoring bracelet is  
ready for use (in the water  
the LED double-flashes).

Red flashes 5-times:  
Alarm sent.

- See *Alarm (active mode)*, P.26
- See *Resetting the monitoring bracelet*, P.27

Further LED flash codes are described in the section *Troubleshooting*, P.42.

## 13.2    The monitoring bracelet connected to a PC or charging station



Red flashes every 5 seconds:  
Battery charging

Green flashes every 5  
seconds:  
Battery is charged

Steady green:  
Communicating with PC



# 14 Maintenance / Service

- Dry the monitoring bracelet with a cloth after use.
- Charge the battery if the red LED on the monitoring bracelet flashes at one-second intervals (when the unit is out of the water). See *Charging the monitoring bracelet's battery*, P. 33.
- Occasionally clean the water contacts on the monitoring bracelet using methylated spirits.
- Protect the water contacts from soiling (e.g. sun cream).
- Clean the alarm box and cable with a damp cloth. Never use cleaning agents that contain solvents.

# 15 Troubleshooting

Problem	Possible cause	Solution
An alarm is not triggered during the test with a monitoring bracelet.	The alarm box is not connected to the power supply.	Connect the alarm box to the power supply.
	The monitoring bracelet's battery is discharged (no LEDs illuminate).	See <i>Charging the monitoring bracelet's battery</i> , P. 33.
	The alarm depth set on the monitoring bracelet is deeper than the immersion depth.	Verify the monitoring bracelet settings.
	The monitoring bracelet does not detect water.	Clean the water contacts, see <i>Maintenance / Service</i> , P. 42.
	The pool sensor is incorrectly fitted into the mounting ring.	Refit the pool sensor with the word "Sensor" facing into the swimming pool.
During the test the alarm was not triggered from all parts of the swimming pool	The pool sensor cannot receive the alarm.	Reposition the pool sensor.



Problem	Possible cause	Solution
During operation the alarm box transmits a short tone sequence.	Power failure	Have the mains connection checked by an approved electrician. See <i>Safety notes</i> , P. 6.
An alarm activates for 2 seconds during operation	Uninterruption of the pool sensor connection (>2 seconds)	The pool must be monitored by a person. Check the pool sensor connection.
The PC does not detect the monitoring bracelet, or an error message appears on the PC.	No connection	Check the connections (PC / USB cable / magnetic adapter / monitoring bracelet).
		Reset the monitoring bracelet, see <i>Calling the status / Clearing the alarm / Resetting</i> , P. 36.
Monitoring bracelet: The LEDs do not illuminate.	The monitoring bracelet's battery is discharged.	See <i>Charging the monitoring bracelet's battery</i> , P. 33
Monitoring bracelet: The green LED does not double flash in the water.	The monitoring bracelet does not detect water.	Clean the water contacts, see <i>Maintenance / Service</i> , P. 42
Monitoring bracelet: Red double flashes.	Alarm being transmitted (monitoring bracelet in the water).	See <i>Alarm (active mode)</i> , P. 26.
Monitoring bracelet: Red flashes in triple time.	Alarm transmitted, low battery.	See <i>Alarm (active mode)</i> , P. 26. Batterie laden, see <i>Charging the monitoring bracelet's battery</i> , P. 33.
Monitoring bracelet: Red or green flash or double flash.	Low battery (monitoring bracelet in the water).	Charging the battery, see <i>Charging the monitoring bracelet's battery</i> , P. 33.



Problem	Possible cause	Solution
Monitoring bracelet: Permanent red	Defective battery	Contact a BlueFox dealer.
<b>STD PRO</b> The radio alarm dongle is not flashing.	The radio alarm dongle is not connected to the power supply.	Connect the radio alarm dongle to the USB power supply.
	The radio alarm dongle does not recognise the alarm box.	Pair the radio alarm dongle with the alarm box in use, see <i>Pairing the radio alarm dongle with the alarm box</i> , P. 31
<b>STD PRO</b> The radio alarm dongle's buzzer does not sound during an alarm.	The radio alarm dongle is not connected to the power supply.	Connect the radio alarm dongle to the USB power supply.
	The radio alarm dongle does not recognise the alarm box.	Pair the radio alarm dongle with the alarm box in use, see <i>Pairing the radio alarm dongle with the alarm box</i> , P. 31



# 16 Technical Specifications

## 16.1 General

Maximum number of monitoring bracelets: unlimited

### Alarm box

- AC 100-240V, 50 Hz
- Power consumption in standby: 0.2 W
- Power consumption in operation: approx. 1.3 W
- Siren: Sound power level approx. 100 dB(A)
- IP65
- Range of the transmitter: Approx. 270 m (line of sight)

### Monitoring bracelet

- Ultrasonic transmitter
- Rechargeable battery (see *Charging the monitoring bracelet's battery, P.33*)

### Pool size / number of pool sensors

- A single sensor (**BAS STD**) can be used to monitor pool sizes of up to 50 m²;
- 2 sensors (**PRO**) will cover pools of up to 100 m².

### **STD PRO** Radio alarm dongle

- Siren: Sound pressure level approx. 80 dB(A)
- Transmitter range of a radio alarm dongle: Approx. 50 m (line of sight)
- Maximum number of radio alarm dongles: Unlimited

## 16.2 Operational, transport and storage conditions

	Operating conditions	Transport and storage conditions
<b>Alarm box</b>		
Rel. humidity max.:	100% incl. condensing	10-95% non-condensing
Temperature:	-20 to 50 °C -4 to 122 °F	5 to 45 °C 41°F to 113 °F
<b>Monitoring bracelet / Pool sensor</b>		
Rel. humidity max.:	100% incl. immersion	10-95% non-condensing
Temperature:	10 to 45 °C 50°F to 113 °F	5 to 45 °C 41°F to 113 °F
Maximum depth:	20 m (66 feet)	



	Operating conditions	Transport and storage conditions
--	----------------------	----------------------------------

**Plug-in mains adapter / USB plug-in mains adapter / USB cable / Magnetic adapter**

Rel. humidity max.:	95% non-condensing	10-95% non-condensing
Temperature:	10 to 45 °C 50°F to 113 °F	5 to 45 °C 41°F to 113 °F

**PRO STD Radio alarm dongle**

Rel. humidity max.:	95% non-condensing	10-95% non-condensing
Temperature:	10 to 45 °C 50°F to 113 °F	5 to 45 °C 41°F to 113 °F



### 16.3 Power failure

If the power should fail the alarm box will sound a sequence of warning tones. See also *Safety notes*, P. 6.

The operating mode of the alarm box will not change if the power is disconnected.

### 16.4 Monitoring bracelet battery capacity

Hours of operation / week	Battery charge sufficient for approx.	Notes
0	10 months**	Monitoring bracelet is not moved  Assumption: The monitoring bracelet is not moved between use.
3*	6 months**	
14*	4.5 months**	
28*	3 months**	
35*	2 months**	

\* Assumption: 50% of the operational hours in water, 50% out of the water, no alarm.

\*\* Thereafter the charge indicator appears (red LED flashes).

## 17 Disclaimer

Deep Blue AG accepts no liability whatsoever for any kind of damages resulting directly or indirectly from the use of the BlueFox safety system in general or from the BlueFox monitoring bracelet and pool sensors in particular where the damages are attributable to inexact compliance with the installation and operating instructions and further stipulations of Deep Blue AG, or if the damages result directly or indirectly from the consequences of non-compliance with fundamental safety regulations.



## 18 Warranty

Deep Blue AG provides a product warranty in accordance with the laws of your country, but for a period of at least two years commencing with the date of sale of the BlueFox safety system to the end customer.

The warranty applies solely to deficiencies attributable to material or manufacturing faults.

When asserting warranty claims the original sales slip showing the date of sale must be attached. Repairs carried out under the terms of the warranty may only be carried out by authorised Deep Blue service centres otherwise the warranty becomes void.

The warranty does not cover:

- Damage caused by improper use
- Damage caused by the use of force, damage caused by outside influences or by foreign objects
- Damage caused by non-observance of the operating instructions
- Normal wear

In addition, the warranty does not cover devices that have been partially or completely disassembled.



# 19 Disposal

Protect the environment! Packaging and old equipment contain recoverable materials that should be recycled.  
The BlueFox system or components thereof must not be disposed of along with normal domestic waste! Take old equipment to a collection point (EU Directive 2002/96/EC).

# 20 Optional Accessories

Accessories	
Extension cable alarm box - pool sensor	5 m / 10 m (16 / 33 feet)
Adhesive for fitting the pool sensor	INNOTEK Adheseal Tube - 50ml
Monitoring bracelet	Various colours
Radio alarm dongle	



## 21 Configuration table

[illegible]









## Deep Blue AG

Engenbühl 130  
CH-5705 Hallwil  
Switzerland

Tel: +41 (0) 62 767 77 99  
[www.bluefox-poolsafety.com](http://www.bluefox-poolsafety.com)  
[info@deepblue.ch](mailto:info@deepblue.ch)

